Attorney Docket No.: Q80771

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 10/810,701

## **REMARKS**

Claims 1 and 5 have been amended to recite that the particulate solid acid catalyst comprises a polymer resin arranged between the gas cathode and the membrane, and that the method includes supplying an aqueous electrolyte containing acetic acid and/or an acetate to the cathode chamber so as to contact the solid acid catalyst. As shown in Fig. 2, acetic acid solution and oxygen gas are supplied via catholyte inlet 46 so as to contact solid acid catalyst 44 comprising a polymer resin as described at page 10 of the specification.

Entry of the amendments and review and reconsideration on the merits are requested.

Claims 1 and 2 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,387,238 to Merk et al. The Examiner considers Merk et al. as meeting each of the terms of the rejected claims, including "electrolytically" synthesizing a peracetic acid-containing aqueous solution.

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Merk et al. in view of U.S. Patent No. 6,949,178 to Tennakoon et al.

The Examiner primarily relies on Merk et al. Tennakoon et al. is cited as disclosing electrolytic synthesis of peracetic acid from acetic acid and/or acetate and an oxygen-containing gas as starting materials in the presence of a solid acid catalyst (citing column 12, lines 19-47).

Applicants traverse, and respectfully request the Examiner to reconsider in view of the amendment to the claims and the following remarks.

## Particulate Solid Acid Catalyst Comprising a Polymer Resin:

In the Amendment filed April 17, 2007, Applicants noted that the present invention employs a particulate solid acid catalyst arranged between the gas cathode 42 and the membrane 43, whereas Merk et al. does not disclose the use of a particulate solid acid catalyst.

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The Examiner disagreed, asserting that Merk et al. does disclose such particulate solid acid catalyst at column 4, lines 41-64; at column 5, lines 24-34 and at column 8, lines 64-66. In the Response to Arguments at page 7, paragraph (b), the Examiner explained that the peracetic acid precursor *is an acid catalyst itself* as disclosed at column 8, lines 13-52 and at column 8, lines 64-65.

The present claims, however, require a *particulate* solid acid catalyst arranged between the gas cathode 42 and the membrane 43.

The Examiner is apparently pointing to Merk et al. at column 8, lines 64-65 which discloses that the peracetic acid precursor may be supplied in solid form or as a solution.

However, because the peracetic acid precursor is soluble, it cannot exist in "particulate solid form" between the gas cathode and the membrane while also contacting an aqueous solution.

Regarding this last point, the present specification at page 5, line 4 to page 6, line 1 explains the advantages of using a solid acid catalyst (as required by the present claims) and the disadvantages of using a *liquid* acid catalyst and acetylsalicyclic acid or the like. JP-T-2003-506120 cited at page 5, line 18 corresponds to U.S. Patent No. 6,387,238 to Merk et al.

To more clearly distinguish over Merk et al., the acid catalyst is further characterized as comprising a polymer resin. That is, claims 1 and 5 have been amended to recite that the particulate solid acid catalyst comprises a polymer resin and that the method includes supplying an aqueous electrolyte containing acetic acid and/or an acetate to the cathode chamber so as to contact the solid acid catalyst. The subject amendment clearly distinguishes over Merk et al., even if the precursor itself (which cannot exist in particulate solid form between the gas cathode and the membrane while also contacting an aqueous solution) functions as an acid catalyst. As to Tennakoon et al., Applicants reiterate that in the invention, the particulate solid acid catalyst

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44 is arranged between cathode 42 and membrane 43, whereas the catalyst of Tennakoon et al.

provided on the surface of anode 204 is present in the anode compartment and is separated from

the cathode 207 via intervening electrolyte 205. Thus, Tennakoon et al. fails to disclose a

particulate solid acid catalyst arranged between the gas cathode and the membrane as required by

the present claims.

Applicants respectfully request entry of the amendment at this stage of prosecution as

placing the case in condition for allowance.

Withdrawal of all rejections and allowance of claims 1, 2 and 5 is earnestly solicited.

In the event that the Examiner believes that it may be helpful to advance the prosecution

of this application, the Examiner is invited to contact the undersigned at the local Washington,

D.C. telephone number indicated below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

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